THE DISTRIBUTION OF CALCIUM AND MAGNESIUM IN A NUMBER OF PASTURE PLANTS
(M.Sc.Hons. Thesis)

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A METHOD was developed in which plant material was fractionated by a successive extraction technique fur calcium and magnesium. Fraction patterns of pasture plants grown under two nitrogen sources (NH_4 + and NO_3) and harvested throughout the year were compared. It was found that the solubility in the plants, as determined by the technique, for both calcium and magnesium differed throughout the year and under the different nitrogen sources. Conditions which favoured low concentrations of calcium and magnesium, namely, cool temperatures and/or ammonium nitrogen, produced plants with low solubility of calcium and magnesium. Magnesium, as expected, was more soluble than calcium. These results were discussed in relation to possible effects on animal health.

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